

Table 3. Levels of trehalose, glucose, fructose, sucrose, and total soluble carbohydrate content in shoots of nontransformed (NT) and six transgenic rice lines (R22, R38, R80 A05, A07, and A27) grown under no stress, salt-stressed (100 mM NaCl for 4 weeks), or drought-stressed (after first 100-hr drought stress cycle) conditions

Line	Trehalose	Glucose	Fructose	Sucrose	Total
Nonstress conditions					
NTC-1	17 ± 5	3.9 ± 0.17	3.4 ± 0.61	46 ± 3.7	53 ± 4.4
NTC-2	16 ± 6	3.8 ± 0.36	3.1 ± 0.70	45 ± 5.1	52 ± 5.6
R22	98 ± 14	5.0 ± 0.39	4.5 ± 0.74	51 ± 1.3	61 ± 2.2
R38	71 ± 11	4.9 ± 0.27	4.3 ± 0.65	49 ± 3.6	58 ± 4.1
R80	55 ± 8	5.5 ± 0.30	4.9 ± 0.79	54 ± 4.5	64 ± 6.0
A05	48 ± 7	5.6 ± 0.33	5.2 ± 0.85	53 ± 9.6	64 ± 10
A07	62 ± 8	5.6 ± 0.44	5.1 ± 0.89	60 ± 8.3	71 ± 9.9
A27	54 ± 9	5.2 ± 0.41	4.6 ± 0.69	52 ± 6.7	62 ± 7.8
Drought-stress conditions					
NTS-1	53 ± 11	4.7 ± 0.75	4.0 ± 0.86	45 ± 2.6	54 ± 3.8
NTS-2	47 ± 8	4.6 ± 0.47	3.5 ± 0.95	49 ± 3.6	57 ± 4.7
R22	156 ± 19	4.9 ± 0.49	3.7 ± 0.78	57 ± 2.3	65 ± 3.5
R38	257 ± 26	5.6 ± 0.66	4.8 ± 0.47	57 ± 6.6	68 ± 7.2
R80	163 ± 23	4.3 ± 1.24	3.1 ± 0.81	51 ± 4.2	59 ± 4.9
A05	508 ± 48	3.7 ± 0.51	2.3 ± 0.41	60 ± 5.6	67 ± 6.4
A07	474 ± 103	4.0 ± 0.83	2.6 ± 0.71	56 ± 8.1	63 ± 10
A27	401 ± 69	3.8 ± 0.42	2.8 ± 0.39	27 ± 2.4	34 ± 3.1
Salt-stress conditions					
NTS-1	29 ± 6	3.5 ± 0.08	3.0 ± 0.04	35 ± 2.7	42 ± 3.9
NTS-2	34 ± 6	3.1 ± 0.11	2.6 ± 0.03	37 ± 2.7	42 ± 4.0

Line	Trehalose	Glucose	Fructose	Sucrose	Total
R22	69 ± 8	4.2 ± 0.12	4.0 ± 0.08	36 ± 2.1	44 ± 2.7
R38	130 ± 19	5.1 ± 0.47	5.2 ± 0.12	38 ± 2.4	48 ± 3.1
R80	76 ± 12	4.2 ± 0.15	3.9 ± 0.10	42 ± 3.0	50 ± 3.8
A05	91 ± 13	4.0 ± 0.14	3.3 ± 0.10	44 ± 4.7	51 ± 5.7
A07	75 ± 8	3.0 ± 0.12	2.3 ± 0.09	34 ± 2.5	40 ± 3.1
A27	143 ± 18	2.8 ± 0.14	1.9 ± 0.10	35 ± 4.9	40 ± 5.8

Means \pm SD ($n = 3$) are presented. Soluble carbohydrate content data is presented as mg/g shoot fresh weight, except in the case of trehalose, where it is presented as $\mu\text{g/g}$ fresh weight.